

IN THE CLAIMS

Please amend the claim as follows:

1. (Currently Amended) A broadcast/communication unified passive optical network system, comprising:

an optical line termination ~~for configured to~~ time-division multiplexing received digital broadcast signals, ~~for to receive~~ing communication signals from an electronic network, and ~~for configured to~~ wavelength-division multiplexing and ~~transmitting the~~ time-division multiplexed digital broadcast signals and the communication signals, ~~and configured to~~ transmit the wavelength-division multiplexed signals;

a plurality of optical network units ~~connected coupled to~~ the optical line termination-[[in one-to-multi connection]], each of said optical network units configured to wavelength-division demultiplex the wavelength-division multiplexed signals receiveding the broadcast signals and the communication signals from the optical line termination, ~~the plurality of optical network units for~~ configured to time-division demultiplexing the time-division multiplexed digital broadcast signals, and configured to outputting a subset of the time-division demultiplexed digital broadcast signals selected in accordance with a subscriber control signal and the communicating signals; and

a plurality of setup boxes ~~connected coupled to~~ each one of the plurality of optical network units-[[in one-to-multi connection]], each of the plurality of setup boxes configured to receiveing the wavelength-division demultiplexed and time-division demultiplexed broadcast signals and the wavelength-division demultiplexed communication signals from a corresponding optical network unit, ~~the plurality of setup boxes further configured and configured to~~ send subscriber control signals input by ~~a~~ the subscriber to the corresponding optical network unit.

2. (Original) The system according to claim 1, wherein the received digital broadcast signals is an MPEG2 multi-program transport stream.

3. (Original) The system according to claim 1, wherein the electronic network is the Internet.

4. (Currently Amended) The system according to claim 1, wherein the optical line termination comprises:

a first and a second format converter ~~for configured to~~ format-converting the digital broadcast signals from a moving image format into a time-division multiplexing (TDM) format;

a first time-division multiplexer ~~which configured to~~ time-division multiplexes the format-converted digital broadcast signals;

a distributor ~~for configured to receiving~~ broadcast signals from the electronic network; and

a first wavelength-division multiplexer being coupled to the first time-division multiplexer, for being configured to wavelength-division multiplexing the communication signals and transmitting the format converted time-division multiplexed digital broadcast signals that is also format converted and the communication signals to the optical network units, and being configured to transmit the wavelength-division multiplexed signals to the optical network units over an optical fiber.

5. (Original) The system according to claim 3, wherein the TDM format is in accordance with a synchronous digital hierarchy/synchronous optical network (SDH/SONET) standard.

6. (Currently Amended) The system according to claim 4, wherein the optical line termination further comprises:

a first and a second local processor ~~for-configured to~~ remultiplexing the broadcast signals to the format converter;

a buffer ~~for-configured to store~~ signals received from the VOD server;

~~a distributor;~~

a first E/O converter ~~for-configured to convert~~ the format-converted digital broadcast signals provided from the time-division multiplexer; and

a second E/O converter ~~for-configured to convert~~ the communication signals provided from the distributor.

7. (Currently Amended) The system according to claim 1, wherein each of the plurality of optical network units comprises:

a second wavelength-division multiplexer ~~for-configured to~~ wavelength-division demultiplexing the signals received ~~through the optical fiber~~ ~~from the optical line termination~~;

a second time-division multiplexer ~~for-configured to~~ time-division demultiplexing the demultiplexed broadcast signals;

a format converter ~~which-configured to~~ converts the broadcast signals having a time-division multiplexing format into a moving image format and to outputs the format-converted signals;

a controller ~~which-configured to~~ transmits only the broadcast signals selected from the format-converted signals in accordance with a subscriber control signal to the setup boxes; and

a distributor ~~which-configured to~~ outputs the subscriber control signal to the controller and to transmits the demultiplexed communication signals to the setup boxes.

8. (Currently Amended) The system according to claim 7, wherein each of the optical network units further comprises:

a first O/E converter ~~which-configured to~~ converts and outputs the digital broadcast signals ~~from~~-among the demultiplexed optical signals provided from the second wavelength-division multiplexer;

a second O/E converter ~~which-configured to~~ converts and outputs the communication signals ~~from~~-among the demultiplexed optical signals provided from the second wavelength-division multiplexer;

a third O/E converter ~~which-configured to~~ converts and outputs the communication signals inputted through the optical fiber;

a first frequency converter ~~which-configured to~~ outputs the signals provided from the controller after converting the frequency thereof into a first intermediate frequency signal;

a second frequency converter ~~which-configured to~~ outputs the signals inputted from the distributor after converting the frequency thereof into a second intermediate frequency signal;

a signal combiner ~~for-configured to combining~~ the signals provided from the first and second frequency converters; and

a ~~first-third~~ E/O converter ~~for-configured to converting~~ the signals provided from the signal combiner through the optical fiber.

9. (Currently Amended) The system according to claim 1, wherein each of the setup boxes comprises:

a signal separator ~~for-configured to separateing~~ the signals received over the optical fiber into broadcast signals and communication signals; and

a hub ~~for-configured to outputting~~ the communication signals provided from one of a

VOD player, a computer and an HDTV to a corresponding subscriber terminal, the hub further configured to receive communication signals including a subscriber control signal for changing broadcast channels from the subscriber terminal.

10. (Currently Amended) The system according to claim 9, wherein each of the setup boxes further comprises:

~~an-a fourth O/E converter for-configured to converting~~ the signals provided from the optical fiber;

a first and a second frequency converter ~~for-configured to~~ downconverting the broadcast signals and the communication signals from an intermediate frequency to a baseband frequency; and

~~an-a fourth E/O converter for-configured to~~ E/O converting and transmitting the communication signals through the optical fiber.

11. (New) The system according to claim 4, wherein the optical line termination further comprises a first E/O converter directly coupled to the first time-division multiplexer and the first wavelength-division multiplexer.

12. (New) The system according to claim 1, wherein the optical line termination is directly coupled to signal sources.